

REMARKS/ARGUMENTS

The listing of claims shown herein includes changes to the claims that were previously made by Applicant's Preliminary Amendment filed October 23, 2001 and the Supplemental Preliminary Amendment filed October 16, 2002. Neither the Preliminary Amendment nor the Supplemental Preliminary Amendment was acknowledged in the Office Action mailed February 12, 2004. If a copy of the Preliminary Amendment or the Supplemental Preliminary Amendment is needed, the Examiner is invited to telephone the undersigned. Applicant requests the Examiner to acknowledge receipt and consideration of the October 23, 2001, Preliminary Amendment and the October 16, 2002, Supplemental Preliminary Amendment.

In amended Fig. 3, the previously omitted element numeral 50 has been added and labels of prior art have been added to Fig. 1 and Fig. 2.

The specification has been amended to include identification of a substantially spoke-shaped frame as part 50. A clean copy of the paragraph bridging pages 3 and 4 has also been provided.

Claims 1-20 have been rejected under 35 U.S.C. § 112, second paragraph, for the reasons set forth at paragraphs 4 and 5 of the Office Action.

In claim 1, "*the lowermost edge*" has been deleted and the claim now refers to:

"an edge of each flap which extends from a radially inner to a radially outer part of the backing plate"

In claims 4 and 8 "*the angle*" has been replaced by "*an angle*".

In claim 12 and 18 "*the process*" has been deleted and replaced by "*the steps of rotating feeding and severing*".

In claims 6 and 16 reference to the center line of each flap being "*substantially on*" a radius of the backing plate has been amended to "*substantially parallel to*" a radius of the backing plate.

In view of the above amendments to the claims, Applicant submits that all claims are now in compliance with 35 U.S.C. § 112. Withdrawal of all rejections under 35 U.S.C. § 112 is requested.

Claims 1, 2 and 4 to 11 are rejected as allegedly being anticipated by Emerson, Figures 5 and 6. However, Emerson illustrates what is known in this field as a "flap wheel", rather than a "flap disc". In Emerson Figure 5 it is clear that the abrasive flaps 44 are secured around the outer circumference of the support member 32. In contrast, in the present invention the abrasive flaps are secured on one of the circular faces of the backing plate.

Claim 1 has been amended to better bring out this distinction by indicating the backing flap is "*disc-shaped*" and that the flaps are bonded to the backing plate "*along an edge of each flap which extends from a radially inner to a radially outer part of the backing plate*".

It is noted that Emerson Figure 2 does show a flap disc with flaps bonded to one of the circular faces of a backing plate in a similar manner to the present invention. However, it is noted in Emerson that column 4, lines 23 to 26 that :

"flaps 22 have a rigid disposition relative to the portion 20 of the support member 12 even when the abrasive wheel 10 is rotated against a work surface to be polished." (emphasis added).

Thus, Emerson Figure 2 does not provide flaps which have freedom to flex and conform to an underlying surface in use, as required by claim 1. Therefore, it is submitted that claim 1 is both novel and non-obvious over Emerson.

Applicant submits that dependent claims 2 and 4-11 are also patentable over Emerson for at least the same reasons as set forth above regarding claim 1, from which they depend.

Claims 1, 2 and 4 to 11 are also rejected as allegedly being anticipated by Hall. However, the amendments made to claim 1 as discussed above also distinguish the claim over Hall which shows folded flaps 26 secured within slots formed in the periphery of a disc 20 and partially covered by end plates 30. Hall does not have flaps bonded to the plate "*along an edge of each flap which extends from a radially inner to a radially outer part of the backing plate*". Therefore, Applicant submits that claim 1 is novel and non-obvious over Hall.

Applicant submits that dependent claims 2 and 4-11 are also patentable over Hall for at least the same reasons as set forth above regarding claim 1, from which they depend. Withdrawal of all rejections under 35 U.S.C. §102 is respectfully requested.

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Applicant thanks the Examiner for the indication that rewritten claims 3 and 12-17 would be allowable if re-written in independent form.

Original claims 3 and 12 have been rewritten as new independent claims 21 and 22. New dependent claims 23 to 27, depending from claim 22 are also added.

CONCLUSION

In view of the foregoing remarks, Applicant respectfully requests favorable reconsideration of the present application and a timely allowance of the pending claims.

Should the Examiner deem that any further action by Applicant or Applicant's undersigned representative is desirable and/or necessary, the Examiner is invited to telephone the undersigned at the number set forth below.

If there are any other fees due in connection with the filing of this response, please charge the fees to deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,

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Enclosures



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Annotated Sheet

